IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: FINE, et al.   Patent Application

Application No.:   10/797,785   Group Art Unit: 3624

Filed: March 8, 2004   Examiner: Jarret, Scott L.

For: SYSTEM AND METHOD FOR FINANCE FORECASTING

<u>APPEAL BRIEF</u>

Table of Contents

I. Real Party in Interest

The assignee of the present application is Hewlett-Packard Development Company, L.P.

II. Related Appeals and Interferences

There are no related appeals or interferences known to the Appellants.

III. Status of Claims

Claim 2 has been cancelled. Claims 1 and 3-24 are pending. Claims 1 and 3-24 are rejected. This Appeal involves Claims 1 and 3-24.

IV. Status of Amendments

All proposed amendments have been entered. An amendment subsequent to the Final Action has not been filed.

<u>V. Summary of Claimed Subject Matter</u>

Independent Claim 1 recites, "A method (100) of finance forecasting," which is described, according to various embodiments, at paragraphs 0014-0027 and Figure 1. "Creating an information market having a plurality of participants, the information market being implemented on a computer system" is described, according to various embodiments at paragraphs 0015-0019 and Figure 1. "Determining (120) at least one participant characteristic of a participant based on the participants behavior within the information market is described, according to various embodiments at paragraph 00207 and Figure 1. "Defining (720) probability bins, each of the probability bins corresponding to a probability associated with an expected outcome is described, according to various embodiments at paragraphs 0054 and 0055 and Figure 7. "Performing (130) a query process with the probability bins as assets, wherein the computer system receives an input from the participant," is described, according to various embodiments at paragraph 0021 and Figure 1. "Aggregating (140) a result of the query process with weighting for the participant characteristic," is described, according to various embodiments at paragraph 0022 and Figure 1.

Independent Claim 10 recites, "A computer system (800) for finance forecasting," which is described, according to various embodiments, at paragraph 0060 and Figures 1 and 8. "A characteristic determination module (815) that determines at least one participant characteristic of a participant," is described, according to various embodiments at paragraphs 0020, 0060 and Figures 1 and 8. "A probability bin module (820) that defines probability bins each of the probability bins corresponding to a probability associated with an expected outcome," is described, according to various embodiments at paragraphs 0054, 0055, 0060, and Figures 1 and 8. "A query module (825) that performs a query process with the probability bins as assets," is described, according to various embodiments at paragraphs 0020, 0060 and Figures 1 and 8. "An aggregation module (830) that aggregates a result of the query process with weighting for the participant characteristic," is described, according to various embodiments at paragraphs 0022, 0060 and Figures 1 and 8.

Independent Claim 19 recites, "A computer system (800) for finance forecasting," which is described, according to various embodiments, at paragraph 0060 and Figures 1 and 8. "Means for determining (815) at least one participant characteristic of a participant," is described, according to various embodiments at paragraphs 0054, 0055, 0060, and Figures 1 and 8. "Means for defining probability bins (820) each of the probability bins corresponding to a probability associated with an expected outcome," is described, according to various embodiments at paragraphs 0054, 0055, 0060, and Figures 1 and 8. "Means for performing a query process (825) with the probability bins as assets," is described, according to various embodiments at paragraphs 0020, 0060 and Figures 1 and 8. "Means for aggregating a result (830) of the query process with weighting for the participant characteristic," is described, according to various embodiments at paragraphs 0022, 0060 and Figures 1 and 8.

Independent Claim 22 recites, "A computer program stored on a tangible computer-readable medium and configured for execution by a computer," which is described, according to various embodiments at paragraph 0060 and Figures 1 and 8. "A characteristic determination module (815) stored on the tangible computer-readable medium, the characteristic determination module adapted to determine at least one participant characteristic of a participant," is described, according to various embodiments at paragraphs 0054, 0055, 0060, and Figures 1 and 8. "A probability bin module (820) stored on the tangible computer-readable medium, the probability bin module adapted to define probability bins, each of the probability bins corresponding to a probability associated with an expected outcome," is described, according to various embodiments at paragraphs 0054, 0055, 0060, and Figures 1 and 8. "A query module (825) stored on the tangible computer-readable medium the query module adapted to perform a query process with the probability bins as assets," is described, according to various embodiments at paragraphs 0020, 0060 and Figures 1 and 8. "An aggregation module (830) stored on the tangible computer-readable medium, the aggregation module adapted to aggregate a result of the query process with weighting for the participant characteristic," is described, according to various embodiments at paragraphs 0022, 0060 and Figures 1 and 8.

VI. Grounds of Rejection to Be Reviewed on Appeal

1. Claims 1, 3-6, 8-14 and 17-23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,155,510 by Kaplan (referred to hereinafter as "Kaplan") in view of "Approach for Long Term Forecasting with an Application to Solar Electric Energy" by Sarin dated 1979 (referred to hereinafter as "Sarin").

2. Claims 6, 7, 15 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view of Sarin and further in view of "An Approach for Long Term Forecasting with an Application to Solar Electric Energy" published 1979 (referred to herein as "Long Term Forecasting") as applied to claims 1-6, 8-14, and 17-23 above, and further in view of "The Power of Play" published 2001 by Pennock (Referred to hereinafter as "Pennock").

3. Claim 24 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view of Sarin, and further in view of Long Term Forecasting and further in view of U.S. Patent No. 5,608,620 by Lundgren (referred to hereinafter as "Lundgren").

1. Whether Claims 1, 3-6, 8-14 and 17-23 are Obvious Under 35 U.S.C. 103(a) in view of Kaplan and Sarin

Appellants respectfully submit that neither Kaplan nor Sarin, alone or in combination, teach or suggest the embodiments recited by Claims 1, 3-6, 8-14 and 17-23 for at least the following rationale.

KAPLAN

This section describes Appellants' understanding of what Kaplan teaches. Referring to Kaplan's title, Appellants' understand Kaplan to forecasting information using collective intelligence from diverse sources.   Kaplan states at Col. 1 lines 27-33 with regards to conventional methods, "Many of these models are tuned and validated against actual past historical data, and then are used to try and predict future data or behavior. Unfortunately, no known model of this type has worked sufficiently well to overturn the general opinion that the stock market cannot be predicted with any useful degree of accuracy" (emphasis added).

Kaplan further states with regards to conventional methods at Col. 1 lines 60-65,

Other websites and models and methods are associated with such websites have expert analysts on staff who sort through the information generated by the masses, and try to find nuggets that help drive investment decisions… Both web-based approaches rely on conventional wisdom, which says that individual experts… but not ordinary non-expert investors are the key to making good investment decisions" (emphasis added).

At Col. 3 line 53-Col. 4 line 17, Kaplan discusses various conventional doctrines. Referring to Col. 4 lines 3-17, Kaplan states that one of the conventional doctrines (Col. 3 line 53-Col. 4 line 17) is "…even if people did not know anything about the stock market, they would not share it with others, and possibly would rather put false information into the system in order to manipulate the system's predictions to their own financial advantage….Empirical evidence based on initial prototype testing suggests that these supposed problems do not exist or at least do not exist to the detriment of the inventive system and method" (emphasis added).

Kaplan states at Col. 4 lines 63-65, "<u>Key</u> components of the invention include a means for <u>gathering</u> individual forecasts <u>from</u> a plurality of <u>individuals</u> or other entities within a defined period of time."

Therefore, Appellants understand Kaplan to gather forecasts from a plurality of individuals that include ordinary non-experts, such as ordinary non-expert investors, instead of relying on expert analysts. Appellants understand Kaplan to teach using forecasts instead of historical data and to teach using ordinary non-experts instead of experts. Further, based on Kaplan's statements at Col. 1 lines 27-33 and Col. 1 lines 60-65, Appellants understand Kaplan to <u>teach away from</u> <u>using past historical data and experts</u>. Further, referring to Col. 4 lines 3-17, and Col. 4 lines 63-65, since Kaplan states that empirical evidence from a prototype indicates that the conventional doctrine that "people will not share" is not a problem and since Kaplan teaches having individuals provide their own forecasts, Appellants understand Kaplan to <u>teach away from</u> "<u>information that is privately held by individuals</u>."

SARIN

This section describes Appellants' understanding of what Sarin teaches. Sarin states in the abstract,

An approach is proposed that is useful for long term forecasting of market penetration of new technologies, fuel price and availability, business performance, etc. The <u>central idea</u> is to systematically <u>solicit</u> <u>experts'</u> <u>opinion</u> in the form of <u>subjective probability distributions in making future projections</u>..." (emphasis added).

Since Sarin states that the <u>central idea</u> is to solicit <u>experts'</u> opinion, Appellants understand Sarin to <u>require</u> experts' to provide their opinions in order to forecast market penetration of new technologies.

PLOT-MARKETS AS INFORMATION GATHERING

The Office Action asserts that "Markets as Information Gathering Tools" by Plott dated 2000 (referred to herein after as "Plott-MIG"), demonstrates that "providing probability forecasts for various possible/expected outcomes, e.g., probability bins, buckets, classes, ranges of expected outcomes, rain/no rain) is old and very well known" on the second paragraph of page 10. Although, the Office Action did not assert that Plott-MIG suggested the embodiments recited by the instant Application's claims, for the sake of thoroughness, Appellants will describe Appellants' understanding of what Plott-MIG teaches and why Appellants understand Plott-MIG to <u>teach away from</u> Kaplan and Sarin.

Plott-MIG teaches markets as information gathering tools. In the first paragraph, Plott-MIG discusses several examples of information, such as current movement in the stock market, movement of individual stock prices, orange juice futures, which can be used to anticipate events, such as change in interest rates, earnings reports, and future weather in the south. Plott-MIG states in the second paragraph on page 2, "...there is a need to pause and ask ourselves what it means for markets to have such capabilities. First, it means that markets can find the solution to a complex set of equations that are part of the knowledge of no one. Second, it means that while finding this solution, it can collect information that is dispersed across the economy, aggregate it like a statistician, and publish the findings in the form of prices."

Plott-MIG states in the last 5 lines on page 2, "Thus, the information about the equations is not in one head but there is even more information that must be collected. Each individual has <u>private</u> information about the world around him. Expectations based on this <u>private information</u> are <u>sufficient</u> for decisions so long as such expectations are not inconsistent with other information reflected in the behavior of the economy, such as prices" (emphasis added). Plott-MIG states at lines 2-11 on page 3, "Equilibration will not occur until all information is comfortably incorporated into the public observable variables...One the surface, the idea that markets can perform such aggregation seems to be false. It seems to be beyond human capacities. One is tempted to dismiss the theory immediately, without further

thought. However, such dismissal would be premature. The capacities to <u>infer underlying information</u> from the <u>behavior</u> of others is so commonplace that we hardly notice the complex process that is taking place…" (emphasis added).

Starting at the second paragraph on page 11, Plott-MIG states,

The experiments proceed in a series of independent periods, and before each period the subjects are given <u>private</u> information about the state in the upcoming period. <u>No communication or sharing of private information is allowed</u>. Trading takes place in the context of much individual uncertainty as each person gets very little information…Thus, <u>even though each individual had very little information, the "market,"</u> consisting of the aggregate of about 270 observations, three from each of 90 people, <u>had a great deal of information</u>. In other words, the market "knew" the state with near certainty…According to the information aggregate hypothesis of rational expectations, the <u>prices should reflect all available information</u>…" (emphasis added).

Plott-MIG states starting at the first sentence of section 3 on page 12, "If markets have the power to collect and to aggregate information, then harnessing that power could be valuable…It feels that the <u>best information</u> regarding the state of the market resides <u>dispersed</u> as <u>opinions, hunches, and beliefs</u> in its sales force…." (emphasis added). As a part of an experiment described in section 3, Plott-MIG states starting at the last paragraph on page 12 for section 3 to the last sentence of section 3 on page 13, "Each person was allowed to participate was given an endowment of approximately 20 shares in each of the markets. The markets were open for several days, during which participants could <u>buy and sell shares reflecting their beliefs</u>…<u>All indications are</u> that this type of mechanism <u>works in practice</u>."

Plott-MIG states in the last 4 sentences on page 13, "Experiments tell us that the ability of markets to perform the task of information aggregation is closely related to the dynamics that take place in market adjustments. Further, that dynamic is itself closely related to the way that markets are organized and the instruments that exist in the markets for trading…"

Therefore, Appellants understand Plott-MIG to teach that <u>past historical information</u> reflecting the behavior of people, such as prices that people buy and sell,

reflects information, such as opinions, hunches, and beliefs, which is <u>privately held</u> <u>by individuals</u>. Appellants understand Plott-MIG to teach that an aggregation of gathered information, such as prices that people buy and sell items, "is closely related to the dynamics that take place in a market adjustments. Further, that dynamic is itself closely related to the way that markets are organized and the instruments that exist in the markets for trading..."

PLOT-INFORMATION AGGREGATION MECHANISMS

The Office Action asserts that "Information Aggregation Mechanisms: Concept, Design, and Implementation For A Sales Forecasting Problem" by Plott dated 2002 (referred to herein after as "Plott-IAM"), demonstrates that "providing probability forecasts for various possible/expected outcomes, e.g., probability bins, buckets, classes, ranges of expected outcomes, rain/no rain) is old and very well known" on the second paragraph of page 10. Although, the Office Action did not assert that Plott-IAM suggested the embodiments recited by the instant Application's claims, for the sake of thoroughness, Appellants will describe Appellants' understanding of what Plott-IAM teaches and why Appellants understand Plott-IAM to teach away from Kaplan and Sarin.

Plott-IAM states in the last sentence on page 2, "This paper takes the methodologies of experimental economics one step further and reports on the implementation and use of market processes that were designed explicitly for the purpose of performing the task of accumulating and organizing information that is held in a widely <u>dispersed</u> and subjective form" (emphasis added).

Plott-IAM states in the first sentence of the last paragraph on page 2, "Economists have long understood that, in theory, the <u>prices</u> in properly designed markets reflect the collection of <u>all</u> the information possessed by <u>all the traders</u> about <u>future events</u>" (emphasis added).

Plott-IAM states at lines 13-21 of the second paragraph on page 3,

In a perfect world, with unlimited time and resources, a user of such information could personally interview everyone that might have a relevant insight but such luxury does not exist. Gathering the bits and pieces by traditional means, such as business meetings, is highly inefficient because of a host of practical problems related to location, incentives, the insignificant amounts of information in any one place, and even the absence of a methodology for gathering it. Further, <u>business practices such as quotas and budgeting settings create incentives for individuals not to reveal their information</u>…" (emphasis added).

Therefore, Appellants understand Plott-IAM to teach accumulating and organizing information that is held in a widely dispersed and subjective form and to teach away from individuals revealing information that is private to them.

NO MOTIVATION TO COMBINE

This section describes why Appellants believe that there is no motivation to combine Kaplan, Sarin, Plott-MIG, and Plott-AIM, because Appellants believe that various combinations of Kaplan, Sarin, Plott-MIG, and Plott-AIM <u>teach away from</u> each other. Appellants respectfully submit that "[i]t is improper to combine references where the references <u>teach away from</u> their combination" (emphasis added; MPEP 2145(X)(D)(2); *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)). Appellants respectfully note that "[a] prior art reference must be considered in its entirety, i.e., as a <u>whole</u>, including portions that would lead away from the claimed invention" (emphasis in original; MPEP 2141.02(VI); *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)). Appellants respectfully submit that there is no motivation to combine the teachings of Kaplan, Sarin, Plott-MIG, and Plott-AIM, because various combinations of Kaplan, Sarin, Plott-MIG, and Plott-AIM <u>teach away from</u> each other. More specifically, Appellants understand Kaplan and Sarin to teach away from each other. Further, Appellants understand Kaplan and Sarin to teach away from Plott-AIM and Plott-MIG. Further, Appellants understand Plott-AIM and Plott-MIG to teach away from both Kaplan and Sarin.

As discussed herein, Appellants understand Kaplan to <u>teach away from</u> using experts (Col. 1 lines 60-65, Col. 4 lines 3-17, Col. 4 lines 63-65) whereas Sarin

<u>requires</u> experts (Abstract). Therefore, Appellants understand Kaplan and Sarin to <u>teach away from</u> each other.

As discussed herein, Appellants understand Kaplan to <u>teach away from</u> using past historical information and information that is privately held by individuals (Col. 1 lines 27-33, Col. 1 lines 60-65, Col. 3 line 54-Col. 4 line 17, Col. 4 lines 63-65). In contrast, Plott-MIG teaches past historical information and information that is privately held by individuals (last 5 lines on page 2, second paragraph on page 11, last sentence of section 3 on page 13). Therefore, Appellants understand Kaplan and Plott-MIG to teach away from each other.

As discussed herein, Appellants understand Plott-IAM to teach away from individuals revealing information that is private to them because they would have no incentive to do so (lines 13-21 of second paragraph on page 3). In contrast, Kaplan teaches that the conventional wisdom that individuals would not share their information is incorrect (Col. 4 lines 3-17). Therefore, Kaplan and Plott-IAM teach away from each other.

As discussed herein, Appellants understand Kaplan to teach receiving forecasts from a plurality of individuals (Col. 4 lines 63-75). Therefore, Appellants understand Kaplan to inherently teach a central location, such as web site, that a plurality of individuals can enter their forecasts. In contrast to <u>individuals taking the initiative to enter their forecasts into a central location</u>, Plott-IAM teaches accumulating and organizing information that is held in a widely <u>dispersed</u> and subject form (last sentence on page 2).

As discussed herein, Appellants understand Sarin to <u>require</u> that <u>experts provide</u> their <u>opinions</u> in a form (abstract). In contrast, Plott-MIG teaches using past historical information that reflects privately held information about individuals (last 5 lines on page 2, second paragraph on page 11, last sentence of section 3 on page 13). Sarin <u>requires</u> providing information (abstract). Plott-MIG teaches using the behavior of individuals to determine "privately held information" (last 5 lines on page 2, second paragraph on page 11, last sentence of section 3 on page 13). Sarin

requires "experts" (abstract). Plott-MIG teaches "individuals" that each have very little information about the market as reflected in their behavior of selling and buying (second paragraph on page 11). Therefore, Appellants understand Sarin and Plott-MIG to <u>teach away from</u> each other.

Sarin <u>requires</u> "experts" to provide their opinions (abstract). Plott-IAM teaches that there is no incentive for individuals to share their information (lines 13-21 of second paragraph on page 3). For at least this reason, Sarin and Plott-IAM <u>teach away from</u> each other.

Therefore, Appellants understand various combinations of the asserted art, Kaplan, Sarin, Plott-IAM and Plott-MIG, to <u>teach away from</u> each other.

RESPONSE TO ARGUMENTS SECTION

The Office Action states in the second and third paragraphs on page 4, "Specifically Appellants argue that Kaplan teaches not utilizing experts while Sarin requires experts. Initially it is noted that the claims only call for the creation of an information market having a plurality of participants, the phrase experts is no where recited in the claims...Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims..."

Appellants respectfully traverse. Appellants are not reading limitations from the specification into the claims. MPEP 2145(X)(D)(2) clearly states that "[i]t is improper to combine references where the references teach away from their combination." Further, "[i]f the proposed modification would render the prior art invention being modified <u>unsatisfactory for its intended purpose</u>, then there is no suggestion or motivation to make the proposed amendment" (emphasis added) (MPEP 2143.01(V); *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)). Appellants are arguing that there is no motivation to combine the teachings of Kaplan and Sarin because they teach away from each other.

The Office Action states in the last paragraph on page 4, "Further it is noted that applicant's specification provides no definition of the phrase expert and as such

the phrase would be given its common and custom meaning, broadest reasonable interpretation in light of the specification."

Appellant respectfully traverses. Appellants respectfully submit that Appellants are arguing that Kaplan and Sarin teach away from each other. Therefore, the definitions of "expert" and "non-expert" would come from Kaplan and Sarin, not from Appellants' specification. Kaplan <u>requires</u> "ordinary non-expert investors" and <u>teaches away from</u> "expert analysts on staff who sort through the information generated by the masses, and try to find nuggets that help drive investment decisions" (Col. 1 lines 60-65). In contrast, Sarin <u>requires</u> "experts" to provide their opinions (abstract). Sarin states with regards to "experts" that they are "from utility companies, government agencies, research laboratories, and universities" (abstract). Sarin states in the lines 8-11 of the first paragraph under section 1, "Thus, the knowledge and the experience of 'experts' is often the only data source…" Appellants understand experts "from utility companies, government agencies, research laboratories, and universities" that are "often the only data source" <u>to teach away from</u> "ordinary non-expert investors."

The Office Action states in the second and third paragraphs on page 5, "In response to Applicant's argument that Kaplan teaches away from 'information that is privately held by individuals' and that that Kaplan teaches away from using past historical information and information privately held by individuals as is taught by Plott-MIG…, the examiner respectfully disagrees. It is noted that the features upon which applicant relies…are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims…"

Appellant respectfully traverses. Appellants respectfully reiterate that Appellants are arguing that Kaplan and Plott-MIG teach away from each other. As already discussed herein, MPEP 2145(X)(D)(2) and MPEP 2143.01(V) clearly indicate that there is no motivation pieces of asserted art when those pieces of asserted art teach away from each other.

The Office Action states in the first paragraph on page 6, "In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references…"

Appellants respectfully disagree. Appellants respectfully submit that Appellants are demonstrating that when Kaplan, Sarin, Plott-MIG and Plott-AIM are considered in their "…entirety, i.e., as a whole, including portions that would lead away… "(emphasis in original; MPEP 2141.02(VI); *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984), there is no motivation to combine the teachings of Kaplan, Sarin, Plott-MIG, and Plott-AIM, because various combinations of Kaplan, Sarin, Plott-MIG, and Plott-AIM teach away from each other. Appellants respectfully submit that by ignoring those portions of Kaplan, Sarin, Plott-MIG, and Plott-AIM that lead away, the Office Action is failing to consider Kaplan, Sarin, Plott-MIG, and Plott-AIM in their entirety, i.e., as a whole.

Further, Appellants respectfully note that the Office Action did not respond to Appellants' arguments that, when considered in their entirety, Kaplan, Sarin, Plott-MIG, and Plott-AIM teach away from each other. Appellants respectfully request that future Office Action respond to all of Appellants' remarks.

SUMMARY

Because Applicants understand various combinations of the asserted art to teach away form each other, Applicants respectfully submit that the embodiments recited by the instant applications, serial no. 10/797,785, claims are patentable.

2. Whether Claims 6, 7, 15 and 16 are Unpatentable Under 35 U.S.C. 103(a) in view of Kaplan, Sarin, Long Term Forecast and Pennock

Appellants have reviewed the asserted art and respectfully submit that none of Kaplan, Sarin, Long Term Forecast and Pennock teach or suggest the embodiments recited by Claims 6, 7, 15 and 16 for at least the reasons that there is no motivation to combine Kaplan and Sarin because they teach away from each other as discussed herein. Further, no other asserted art, such as Long Term Forecast or Pennock, can remedy the deficiencies in Kaplan and Sarin because there is no motivation to combine Kaplan and Sarin. For at least these reasons, Appellants respectfully submit that the embodiments recited by Claims 6, 7, 15 and 16 are patentable.

3.   Whether Claim 24 is Unpatentable Under 35 U.S.C. 103(a) in view of Kaplan, Sarin, Long Term Forecasting and Lundgren

Appellants have reviewed the asserted art and respectfully submit that none of Kaplan, Sarin, Long Term Forecast and Lundgren teach or suggest the embodiments recited by Claims 6, 7, 15 and 16 for at least the reasons that there is no motivation to combine Kaplan and Sarin because they teach away from each other as discussed herein. Further, no other asserted art, such as Long Term Forecast or Lundgren, can remedy the deficiencies in Kaplan and Sarin because there is no motivation to combine Kaplan and Sarin. For at least these reasons, Appellants respectfully submit that the embodiments recited by Claims 6, 7, 15 and 16 are patentable.

<u>Conclusion</u>

Appellants believe that pending Claims 1, 3-6, 8-14 and 17-23 are patentable over Kaplan and Sarin. Appellants believe that pending Claims 6, 7, 15 and 16 are patentable over Kaplan, Sarin, Long Term Forecasting, and Pennock. Appellants believe that pending Claim 24 is patentable over Kaplan, Sarin, Long Term Forecasting, and Lundgren. As such, Appellants submit that Claims 1-38 are patentable over the asserted art.

Appellants respectfully request that the rejection of Claims 1 and 3-24 be reversed. The Appellants wish to encourage the Examiner or a member of the Board of Patent Appeals to telephone the Appellants' undersigned representative if it is felt that a telephone conference could expedite prosecution.

Respectfully submitted,
Wagner Blecher LLP

Dated: _____   _____

John P. Wagner, Jr.
Registration No.: 35,398

Wagner Blecher LLP
Westridge Business Park
123 Westridge Drive
Watsonville, CA 95076

Phone: (408) 377-0500
Facsimile: (831) 722-2350

VIII. Appendix - Clean Copy of Claims on Appeal

1. A method of finance forecasting, comprising:

creating an information market having a plurality of participants, the information market being implemented on a computer system;

determining at least one participant characteristic of a participant based on the participants behavior within the information market;

defining probability bins, each of the probability bins corresponding to a probability associated with an expected outcome;

performing a query process with the probability bins as assets, wherein the computer system receives an input from the participant; and

aggregating a result of the query process with weighting for the participant characteristic.

3. The method of claim 1, comprising defining a center probability bin and defining the remaining probability bins such that variances associated with the remaining probability bins increase for each of the remaining probability bins as their respective distance from the center probability bin increases.

4. The method of claim 3, comprising providing a mean estimate as the center probability bin.

5. The method of claim 1, wherein defining the probability bins comprises subdividing historical true data into the probability bins.

6. The method of claim 1, wherein the act of performing a query process comprises wagering by the participant on the expected outcome.

7. The method of claim 6, comprising facilitating the participant wagering by providing a web-based software application.

8.   The method of claim 1, wherein the weighting includes an individual participant prediction with exponential factoring for the participant characteristic and the query process as a whole.

9.   The method of claim 1, wherein the query process comprises a matching market.

10.   A computer system for finance forecasting, comprising:
a characteristic determination module that determines at least one participant characteristic of a participant;
a probability bin module that defines probability bins each of the probability bins corresponding to a probability associated with an expected outcome;
a query module that performs a query process with the probability bins as assets; and
an aggregation module that aggregates a result of the query process with weighting for the participant characteristic.

11.   The computer system of claim 10, comprising an information market module adapted to determine the particular characteristic.

12.   The computer system of claim 10, comprising a probability bin variance module that defines a center probability bin and the remaining probability bins such that variances associated with the remaining probability bines increase for each of the remaining probability bins as their respective distance from the center probability bin increases.

13.   The computer system of claim 12, comprising a mean estimate module adapted to provide a mean estimate as the center probability bin.

14.   The computer system of claim 10, comprising a subdividing module that subdivides historical true data into the probability bins.

15.   The computer system of claim 10, comprising a wager module that facilitates wagering by the participant on the expected outcome.

16.   The computer system of claim 15, comprising a web module that facilitates the participant wagering by providing a web-based software application.

17.   The computer system of claim 10, comprising a factoring module that incorporates an individual participant prediction with exponential factoring for the participant characteristic and the query process as a whole.

18.   The computer system of claim 10, comprising a matching market module adapted to determine the expected outcome.

19.   A computer system for finance forecasting, comprising:
means for determining at least one participant characteristic of a participant;
means for defining probability bins each of the probability bins corresponding to a probability associated with an expected outcome;
means for performing a query process with the probability bins as assets; and
means for aggregating a result of the query process with weighting for the participant characteristic.

20.   The computer system of claim 19, comprising means for running an information market to determine the participant characteristics.

21.   The computer system of claim 19, comprising means for defining a center probability bin and means for defining the remaining probability bins such that variances associated with the remaining probability bins increase for each of the remaining probability bins as their respective distance from the center probability bin increases.

22.   A computer program stored on a tangible computer-readable medium and configured for execution by a computer, comprising:

a characteristic determination module stored on the tangible computer-readable medium, the characteristic determination module adapted to determine at least one participant characteristic of a participant;

a probability bin module stored on the tangible computer-readable medium, the probability bin module adapted to define probability bins, each of the probability bins corresponding to a probability associated with an expected outcome;

a query module stored on the tangible computer-readable medium the query module adapted to perform a query process with the probability bins as assets; and

an aggregation module stored on the tangible computer-readable medium, the aggregation module adapted to aggregate a result of the query process with weighting for the participant characteristic.

23.   The computer program stored on a tangible computer-readable medium of claim 22, comprising an information market module stored on the tangible computer-readable medium adapted for running an information market to determine the participant characteristic.

24.   The method of claim 1, further comprising:

providing a reward to the participant based on an accuracy of the result of the query process as compared to a corresponding actual asset.

IX. Evidence Appendix

No evidence is herein appended.

X. Related Proceedings Appendix

No related proceedings.